Title (en)

MICROFLUIDIC SYSTEM SUITABLE FOR LIQUID MIXING, AND METHOD

Title (de)

MIKROFLUIDISCHES SYSTEM ZUR FLÜSSIGKEITSMISCHUNG UND VERFAHREN

Title (fr)

SYSTÈME MICROFLUIDIQUE PERMETTANT LE MÉLANGE DE LIQUIDES ET PROCÉDÉ

Publication

EP 3882637 A1 20210922 (EN)

Application

EP 19883439 A 20190403

Priority

- CN 201811365513 A 20181116
- CN 2019081187 W 20190403

Abstract (en)

A microfluidic system and method suitable for liquid mixing. The microfluidic system uses a pump (400) as the driving source, which draws at least two liquid samples that are to be mixed into the pump (400). Some air is drawn into the pump (400) as well. The system is also comprised of a mixing reservoir (203). The two liquids drawn into the pump (400) are pushed into the mixing reservoir (203). The air bubbles generated by the air have a stirring effect on the mixed liquid in the mixing reservoir (203). After the air bubbles burst, left at rest, and the air has risen to the top of the mixing reservoir (203), the mixed liquid is drawn back to the pump (400) and fed to the outlet (103) for subsequent detection steps. The addition of an antifoaming agent will prevent the accumulation of air bubbles during the mixing process. In the system, the valves (501, 502, 503, 504) and the sensors (601, 602, 603, 604) in the microfluidic channels (301, 302, 303, 304) will be used for the operation of the microfluidic system and for the precise control of the flow.

IPC 8 full level

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CPC (source: CN EP US)

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Designated contracting state (EPC)

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Designated extension state (EPC)

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